not be so located as to cause deformation of the frame by reason of cantilever action.

(5) *Extension of frame.* No saddle-mount shall be located at a point to the rear of the frame of a towing vehicle.

(6) *Nuts, secured.* All nuts used on bolts, U-bolts, king-pins, or in any other part of the saddle-mount shall be secured against accidental disconnection by means of cotter-keys, lock-washers, double nuts, safety nuts, or equivalent means. Parts shall be so designed and installed that nuts shall be fully engaged.

(7) *Inspection of all parts.* The saddle-mount shall be so designed that it may be disassembled and each separate part inspected for worn, bent, cracked, broken, or missing parts.

(8) *Saddle-mounts, marking.* Every new saddle-mount acquired and used in driveaway-towaway operations by a motor carrier shall have the upper-half and the lower-half separately marked with the following certification of the manufacturer thereof (or words of equivalent meaning).

This saddle-mount complies with the requirements of the Federal Highway Administration for vehicles up to 5,000 pounds (or over 5,000 pounds):

Manufactured _____
(Month and year)

by _____
(Name of manufacturer)

(n) *Requirements for devices used to connect motor vehicles or parts of motor vehicles together to form one vehicle*—(1) *Front axle attachment.* The front axle of one motor vehicle intended to be coupled with another vehicle as defined in paragraph (g)(2)(ii) of this section shall be attached with U-bolts meeting the requirements of paragraph (j)(2) of this section.

(2) *Rear axle attachment.* The rear axle of one vehicle shall be coupled to the frame of the other vehicle by means of a connecting device which when in place forms a rectangle. The device shall be composed of two pieces, top and bottom. The device shall be made of 4-inch by ½-inch steel bar bent to shape and shall have the corners reinforced with a plate at least 3 inches by ½ inch by 8 inches long. The device shall be bolted together with ¾-inch bolts and at least three shall be used on each side. Wood may be used as spacers to keep the frames apart and it shall be at least 4 inches square.

(Sec. 12, 80 Stat. 931; 49 U.S.C. 1651 note; section 6 of the Department of Transportation Act, 49 U.S.C. 1655, and the delegations of authority at 49 CFR 1.48 and 389.4)

[33 FR 19735, Dec. 25, 1968, as amended at 35 FR 10907, July 7, 1970; 37 FR 21440, Oct. 11, 1972; 53 FR 49400, Dec. 7, 1988]

Subpart G—Miscellaneous Parts and Accessories

§ 393.75 Tires.

(a) No motor vehicle shall be operated on any tire that (1) has body ply or belt material exposed through the tread or sidewall, (2) has any tread or sidewall separation, (3) is flat or has an audible leak, or (4) has a cut to the extent that the ply or belt material is exposed.

(b) Any tire on the front wheels of a bus, truck, or truck tractor shall have a tread groove pattern depth of at least 4/32 of an inch when measured at any point on a major tread groove. The measurements shall not be made where tie bars, humps, or fillets are located.

(c) Except as provided in paragraph (b) of this section, tires shall have a tread groove pattern depth of at least 2/32 of an inch when measured in a major tread groove. The measurement shall not be made where tie bars, humps or fillets are located.

(d) No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels.

(e) No truck or truck tractor shall be operated with regrooved tires on the front wheels which have a load carrying capacity equal to or greater than that of 8.25–20 8 ply-rating tires.

(f) Tire load rating[1]. (1) General rule: No motor vehicle shall be operated with tires that carry a greater weight than that specified for the tires in any

[1] The load and cold inflation pressure imposed on the rim and wheel must not exceed the rim and wheel manufacturer's recommendations even though the tire may be approved for a higher load or inflation. Rims and wheels may be identified (stamped) with a maximum load and maximum cold inflation rating.

of the publications of the standardizing bodies listed in FMVSS 571.119 (49 CFR 571.119) and marked on the sidewall of the tire unless:

(i) The vehicle is being operated under the terms of a special permit issued by the State, and

(ii) The vehicle is being operated at a reduced speed that is appropriate to compensate for tire loading in excess of the manufacturer's normal rated capacity.

(2) Tire pressure. No motor vehicle shall be operated on a tire which has a cold inflation pressure less than that specified for the load being carried.

(3) If the inflation pressure of the tire has been increased by heat because of the recent operation of the vehicle, the cold inflation pressure shall be estimated by subtracting the inflation buildup factor shown in Table I from the measured inflation pressure.

TABLE I—INFLATION PRESSURE MEASUREMENT CORRECTION FOR HEAT

Average speed of tire in previous hour	Minimum inflation pressure buildup	
	Tires with 4,000 lb (1,814 kg) maximum load rating or less	Tires with over 4,000 lb (1,814 kg) load rating
41 to 55 mi/h 66 to 88.5 km/h).	5 lb/in^2 (0.36 bar)	15 lb/in^2 (1.07 bars).

(Sec. 204, 49 Stat. 546 as amended (49 U.S.C. 304); sec. 6, Pub. L. 89–670, 80 Stat. 937 (49 U.S.C. 1655); 49 CFR 1.48 and 49 CFR 301.60)

[34 FR 9344, June 13, 1969, as amended at 40 FR 44557, Sept. 29, 1975; 41 FR 36657, Aug. 31, 1976; 44 FR 25455, May 1, 1979; 44 FR 47938, Aug. 16, 1979; 53 FR 18057, May 19, 1988; 53 FR 49401, Dec. 7, 1988]

§ 393.76 Sleeper berths.

(a) *Dimensions*—(1) *Size.* A sleeper berth must be at least the following size:

Date of installation on motor vehicle	Length measured on centerline of longitudinal axis (inches)	Width measured on centerline of transverse axis (inches)	Height measured from highest point of top of mattress (inches)[1]
Before January 1, 1953	72	18	18
After December 31, 1952, and before October 1, 1975	75	21	21
After September 30, 1975	75	24	24

[1] In the case of a sleeper berth which utilizes an adjustable mechanical suspension system, the required clearance can be measured when the suspension system is adjusted to the height to which it would settle when occupied by a driver.

(2) *Shape.* A sleeper berth installed on a motor vehicle on or after January 1, 1953 must be of generally rectangular shape, except that the horizontal corners and the roof corners may be rounded to radii not exceeding 10½ inches.

(3) *Access.* A sleeper berth must be constructed so that an occupant's ready entrance to, and exit from, the sleeper berth is not unduly hindered.

(b) *Location.* (1) A sleeper berth must not be installed in or on a semitrailer or a full trailer other than a house trailer.

(2) A sleeper berth located within the cargo space of a motor vehicle must be securely compartmentalized from the remainder of the cargo space. A sleeper berth installed on or after January 1, 1953 must be located in the cab or immediately adjacent to the cab and must be securely fixed with relation to the cab.

(c) *Exit from the berth.* (1) Except as provided in paragraph (c)(2) of this section, there must be a direct and ready means of exit from a sleeper berth into the driver's seat or compartment. If the sleeper berth was installed on or after January 1, 1963, the exit must be a doorway or opening at least 18 inches high and 36 inches wide. If the sleeper berth was installed before January 1, 1963, the exit must have sufficient area to contain an ellipse having a major axis of 24 inches and a minor axis of 16 inches.

(2) A sleeper berth installed before January 1, 1953 must either:

(i) Conform to the requirements of paragraph (c)(1) of this section; or

(ii) Have at least two exits, each of which is at least 18 inches high and 21 inches wide, located at opposite ends of the vehicle and useable by the occupant without the assistance of any other person.